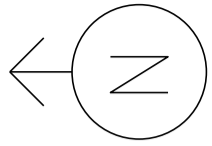
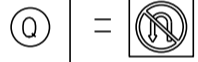
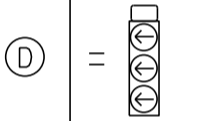
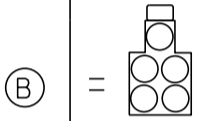


MS # 550

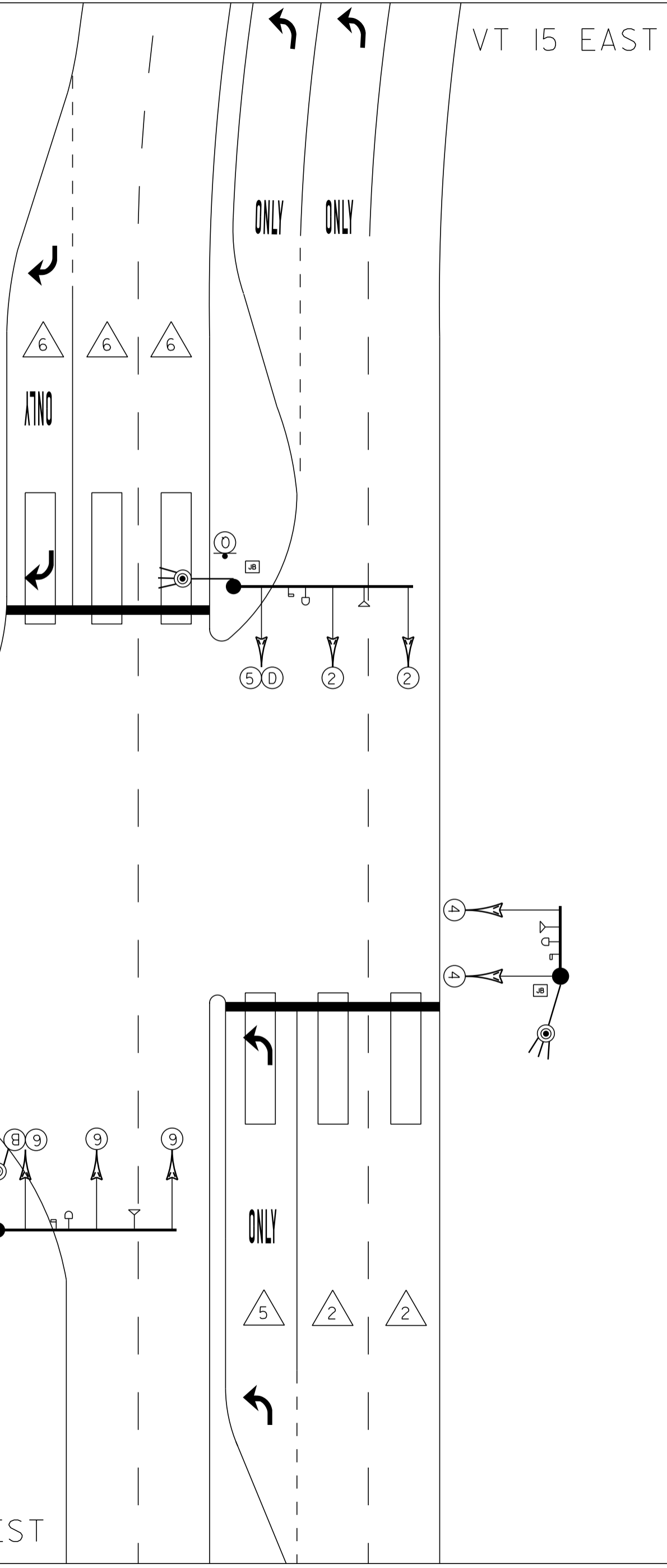
VT 15 EAST



- ⊙ PEDESTAL POST
- ⊙→ PEDESTRIAN SIGNAL
- ⌞ PREEMPTION DETECTOR
- ♀ PREEMPTION STROBE
- ∩ VIDEO CAMERA
- ⊠ CONTROL BOX
- MAST ARM
- ▭ VIDEO DETECTION
- ⊠ JB JUNCTION BOX
- ∩ LUMINAIRE
- ⋯ STANCHION
- ⌞ ROADWAY SIGN



ETHAN ALLEN AVE.



4

B 9 9 9

ONLY

5

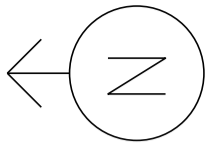
2

2

NOT TO SCALE

VT 15 WEST

MS # 550



VT 15 EAST

ETHAN ALLEN AVE.

12'

STOP BAR 14'

12'

CROSSWALK 58'

STOP BAR 34'

LANE LINE 105'

11' 11' 11'

ONLY

ONLY

ONLY

11' 11'

STOP BAR 22'

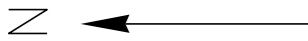
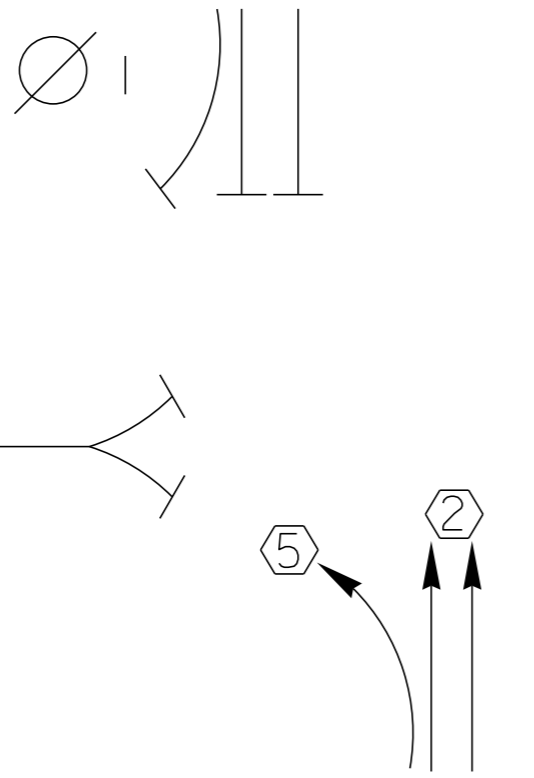
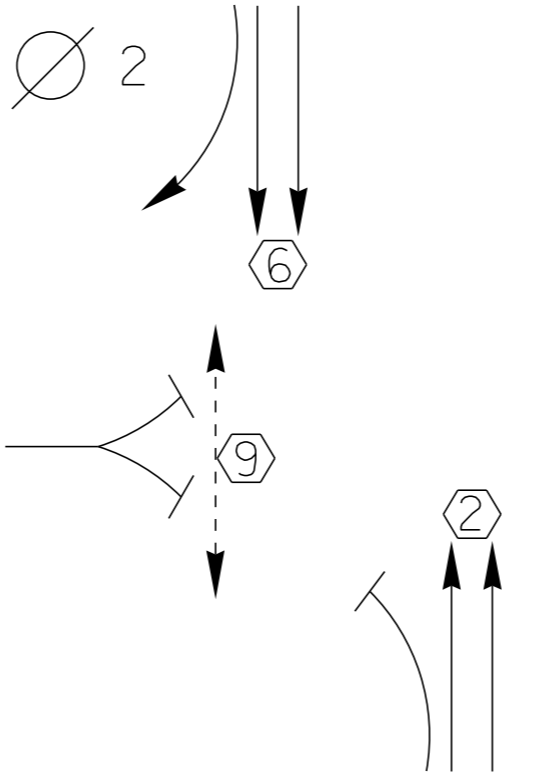
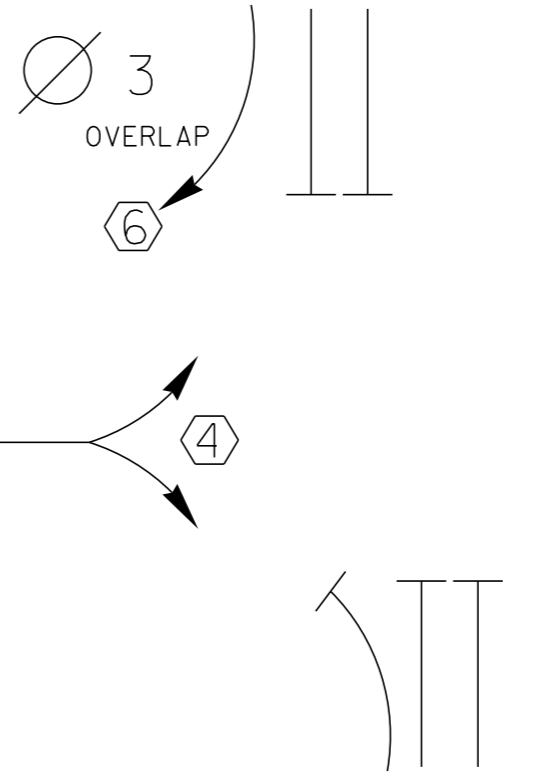





LANE LINE 115'

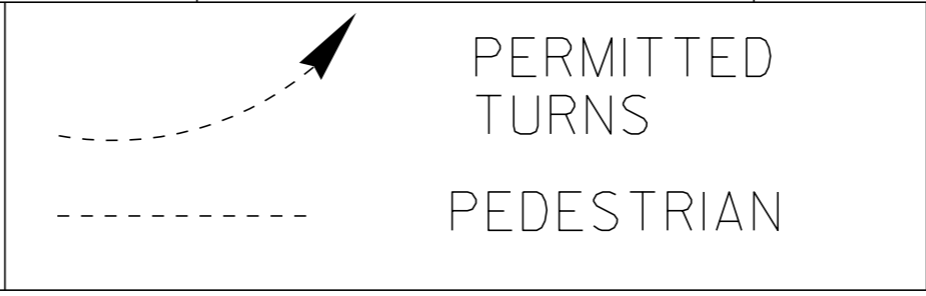
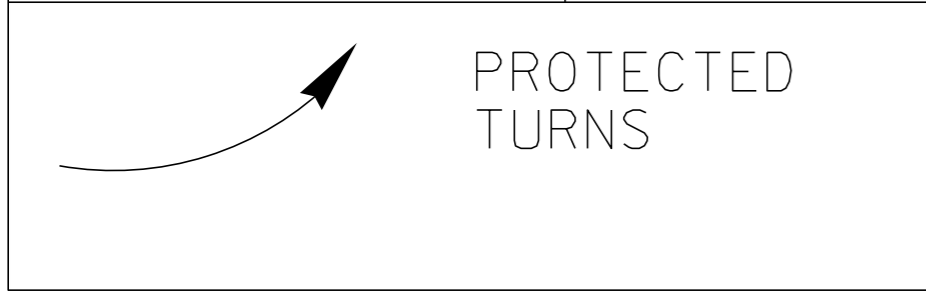
11' 11' 11'

ONLY

NOT TO SCALE

VT 15 WEST

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">D I A G R A M</p> 				
<p>TIMING</p>	<p>G = Y =</p>	<p>G = Y =</p>	<p>G = Y =</p>	<p>G = Y =</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">D I A G R A M</p>				
<p>TIMING</p>	<p>G = Y =</p>	<p>G = Y =</p>	<p>G = Y =</p>	<p>G = Y =</p>



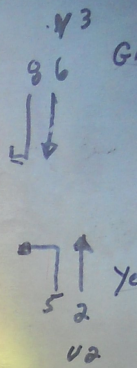
CYCLE LENGTH, C= \_\_\_\_\_ S

PROPERTY OF  
VT. AGENCY OF TRANS.  
MAINTENANCE DIV.  
IN EMERGENCY CALL:  
DIST. TRANS. OFFICE 605-805  
NORTH & WILKINSON 874-7701  
INTERSECTION NO. 98-550

**DANGER**  
115 VOLTS A.C.

**WARNING**  
DO NOT OPERATE  
CABINET WITHOUT  
CMU / MMU  
CABINET WIRING TO SERVA 155-1099 OR LATER

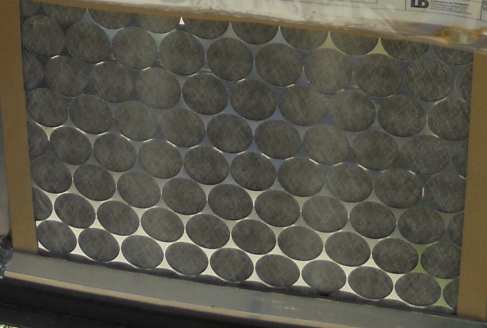
TURN ON  
4-7-2011



Control panel with the following components:

- CONT. EQUIP. SW. (ON/OFF)
- AUTO (ON/OFF)
- COORD. (ON/OFF)
- FLASH (ON/OFF)
- FREE (ON/OFF)
- MAIN SW. (ON/OFF)
- STOP (ON/OFF)
- STOP (ON/OFF)
- STOP (ON/OFF)

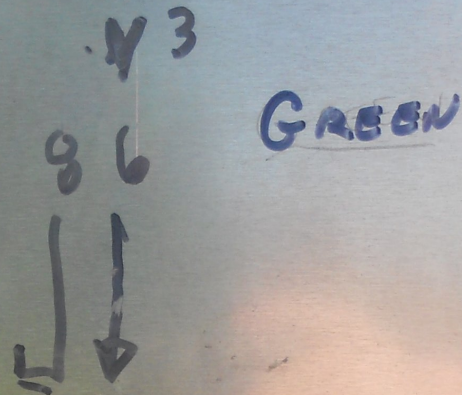
SECONDI  
11-11-11  
76-90-5  
C7-34 Ye-00



**GER**  
TS A.C.

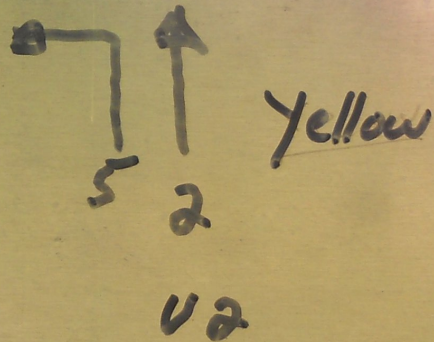
**NING**  
OPERATE  
WITHOUT  
/ MMU  
EMA TS2-1998 OR LATER

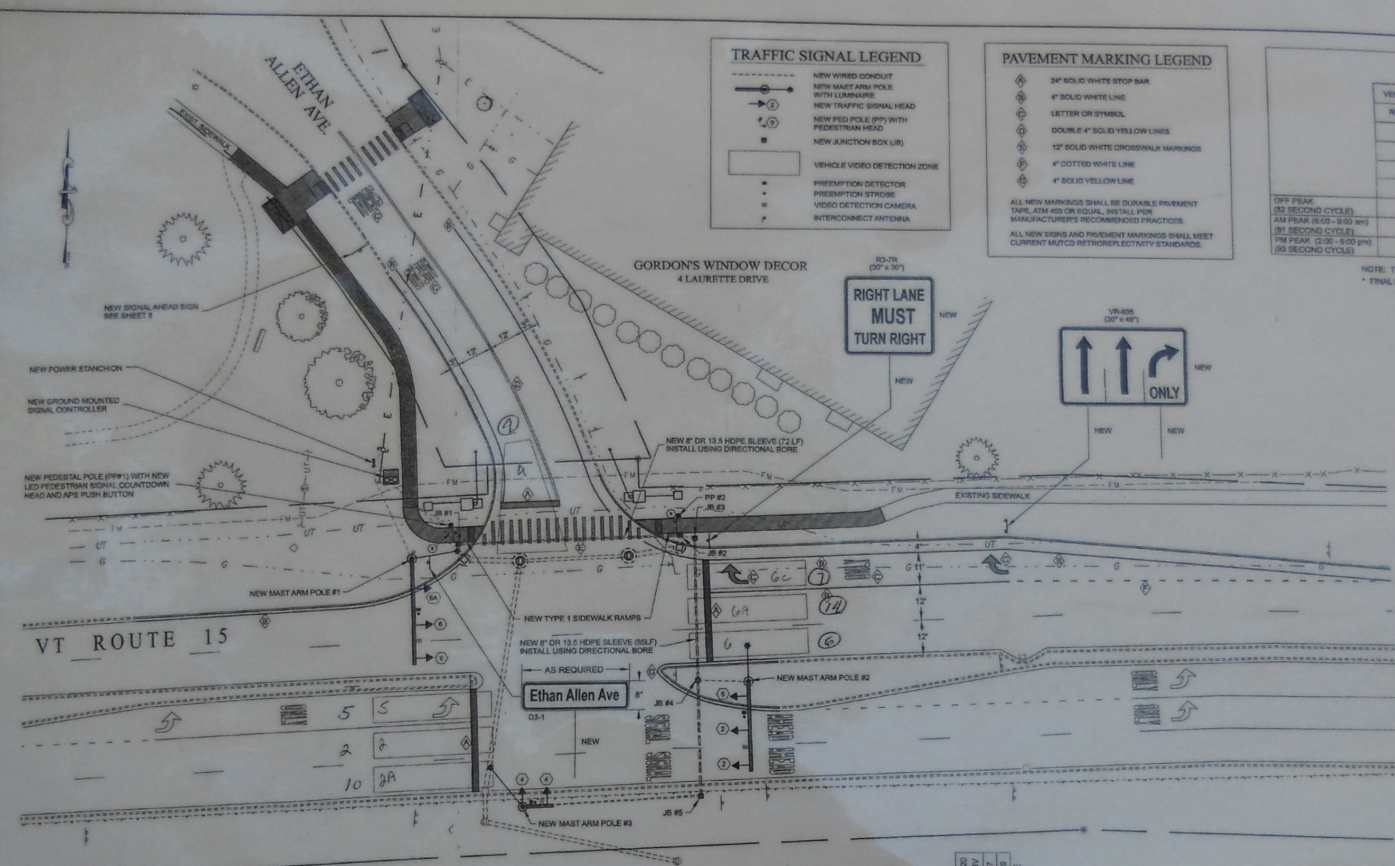
TURN ON  
4-7-2011



ORANGE

V1





### TRAFFIC SIGNAL LEGEND

- NEW WIRED CONDUIT
- NEW MAST ARM POLE WITH LUMINAIRE
- NEW TRAFFIC SIGNAL HEAD
- NEW PED POLE (PP) WITH PEDESTRIAN HEAD
- NEW JUNCTION BOX (JB)
- VEHICLE VIDEO DETECTION ZONE
- PREEMPTION DETECTOR
- PREEMPTION STROBE
- VIDEO DETECTION CAMERA
- INTERCONNECT ANTENNA

### PAVEMENT MARKING LEGEND

- ① 3" SOLID WHITE STOP BAR
- ② 4" SOLID WHITE LINE
- ③ LETTER OR SYMBOL
- ④ DOUBLE 4" SOLID YELLOW LINES
- ⑤ 12" SOLID WHITE CROSSWALK MARKINGS
- ⑥ DOTTED WHITE LINE
- ⑦ 4" SOLID YELLOW LINE

ALL NEW MARKINGS SHALL BE DURABLE PAVEMENT TAPE, ATM 450 OR EQUAL, INSTALL PER MANUFACTURER'S RECOMMENDED PRACTICES.

ALL NEW SIGNS AND PAVEMENT MARKINGS SHALL MEET CURRENT MUTCD RETROREFLECTIVITY STANDARDS.

	PHASE 3+5	PHASE 2+6	PHASE 2+6 WITH RED	PHASE 4 & 6A	PRE-DETECTION
VEHICLE EXTENSION	2			2	
RIGHT TURN DELAY		5	5	5	
MINIMUM GREEN	7				
YELLOW CLEAR	4	4	4	4	4
RED CLEAR	2	2	2	2	2

	PHASE 1 GREEN	PHASE 2 GREEN	PHASE 3 GREEN	PHASE 4 GREEN	PHASE 5 GREEN
OFF PEAK (02 SECOND CYCLE)	9	43	4	43	2
AM PEAK (03 - 0.00 AM)	7	51	4	51	2
PM PEAK (2.00 - 6.00 PM)	15	47	4	47	2

NOTE: THESE SHALL BE NO SCHEDULED FLAMING TIME PERIODS. THE SIGNAL SHALL RUN ON OFF PEAK TIMINGS AT NIGHT.

\* FINAL PREEMPTION TIMINGS TO BE DETERMINED AFTER INSTALLATION WITH INPUT FROM LOCAL FIRE/RESCUE DEPARTMENT.

### PROPOSED SIGNAL TIMINGS

### CONDUIT SCHEDULE

FROM	TO	WIRED CONDUIT	DESCRIPTION
UTILITY POLE	POWER STANCHION	3"	ELECTRICAL SERVICE
POWER STANCHION	CONTROLLER CABINET	3"	ELECTRICAL SERVICE
POWER STANCHION	MAST ARM POLE #1	3"	STREET LIGHT WIRING
POWER STANCHION	JB #1	4"	STREET LIGHT WIRING
JB #1	JB #2	7"	STREET LIGHT WIRING
JB #2	JB #3	5"	STREET LIGHT WIRING
JB #3	JB #4	4"	STREET LIGHT WIRING
JB #4	MAST ARM POLE #2	1"	STREET LIGHT WIRING
JB #4	JB #5	3"	STREET LIGHT WIRING
JB #5	MAST ARM POLE #3	5"	STREET LIGHT WIRING
CONTROLLER CABINET	MAST ARM POLE #1	2"	ANTENNA COAX LEAD-IN
CONTROLLER CABINET	MAST ARM POLE #1	2"	SIGNAL WIRING
CONTROLLER CABINET	JB #1	3"	SIGNAL WIRING
JB #1	PEDESTAL POLE #1	5"	SIGNAL WIRING
JB #1	JB #2	7"	SIGNAL WIRING
JB #2	PEDESTAL POLE #2	5"	SIGNAL WIRING
JB #2	JB #3	5"	SIGNAL WIRING
JB #3	JB #4	4"	SIGNAL WIRING
JB #4	MAST ARM POLE #2	1"	SIGNAL WIRING
JB #4	JB #5	3"	SIGNAL WIRING
JB #5	MAST ARM POLE #3	5"	SIGNAL WIRING

FROM	TO	CONDUIT	DESCRIPTION
JB #1	JB #2	7"	SPARE
JB #2	JB #3	5"	SPARE
JB #3	JB #4	4"	SPARE
JB #4	JB #5	3"	SPARE



① Detects Input #



THE CONTRACTOR SHALL NOTIFY "DIGSAFE" AT 1-888-DIG-SAFE PRIOR TO ANY EXCAVATION.

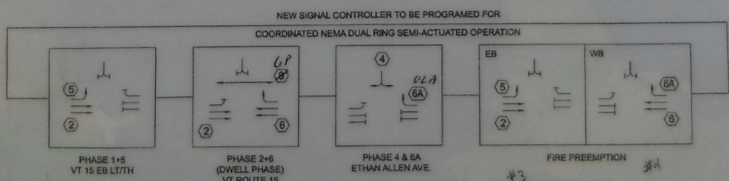
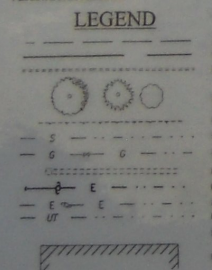
2010 AAWDT		2020	
AM	OFF	PM	DNV
9	18	17	
711	1810	1907	

VT ROUTE 15

2010 AAWDT		2020	
AM	OFF	PM	DNV
112	60	63	
1600	1044	1100	

VT ROUTE 15



### LIST OF MAJOR EQUIPMENT

EQUIPMENT	QUANTITY
MAST ARM POLES & FOUNDATIONS	3
12" POLYCARBONATE TRAFFIC SIGNAL HEADS WITH TUNNEL VISORS AND MOUNTING HARDWARE	7
3-SECTION HEAD	1
S-SECTION HEAD	1
LED HANDSMAN COUNTDOWN PEDESTRIAN SIGNAL HEADS	2
PEDESTAL POLE & FOUNDATIONS	2
ACCESSIBLE PEDESTRIAN PUSH BUTTON ASSEMBLY	2
JUNCTION BOXES	5
VIDEO CAMERAS	3
WIRELESS INTERCONNECT & YAGI ANTENNA	1
GROUND MOUNT SIGNAL CONTROLLER CABINET & CONTROLLER	1
EMERGENCY PREEMPTION SYSTEM	1
EMERGENCY PREEMPTION SYSTEM (80 ALTERNATE #1)	1

THE QUANTITIES LISTED ABOVE ARE APPROXIMATE AND ARE FURNISHED FOR INFORMATION ONLY. MISCELLANEOUS (UNLISTED) WIRE, CABLE, HARDWARE ETC. ARE REQUIRED TO PROVIDE FOR A FUNCTIONING TRAFFIC SIGNAL SYSTEM.

07-2946

FINAL PLAN

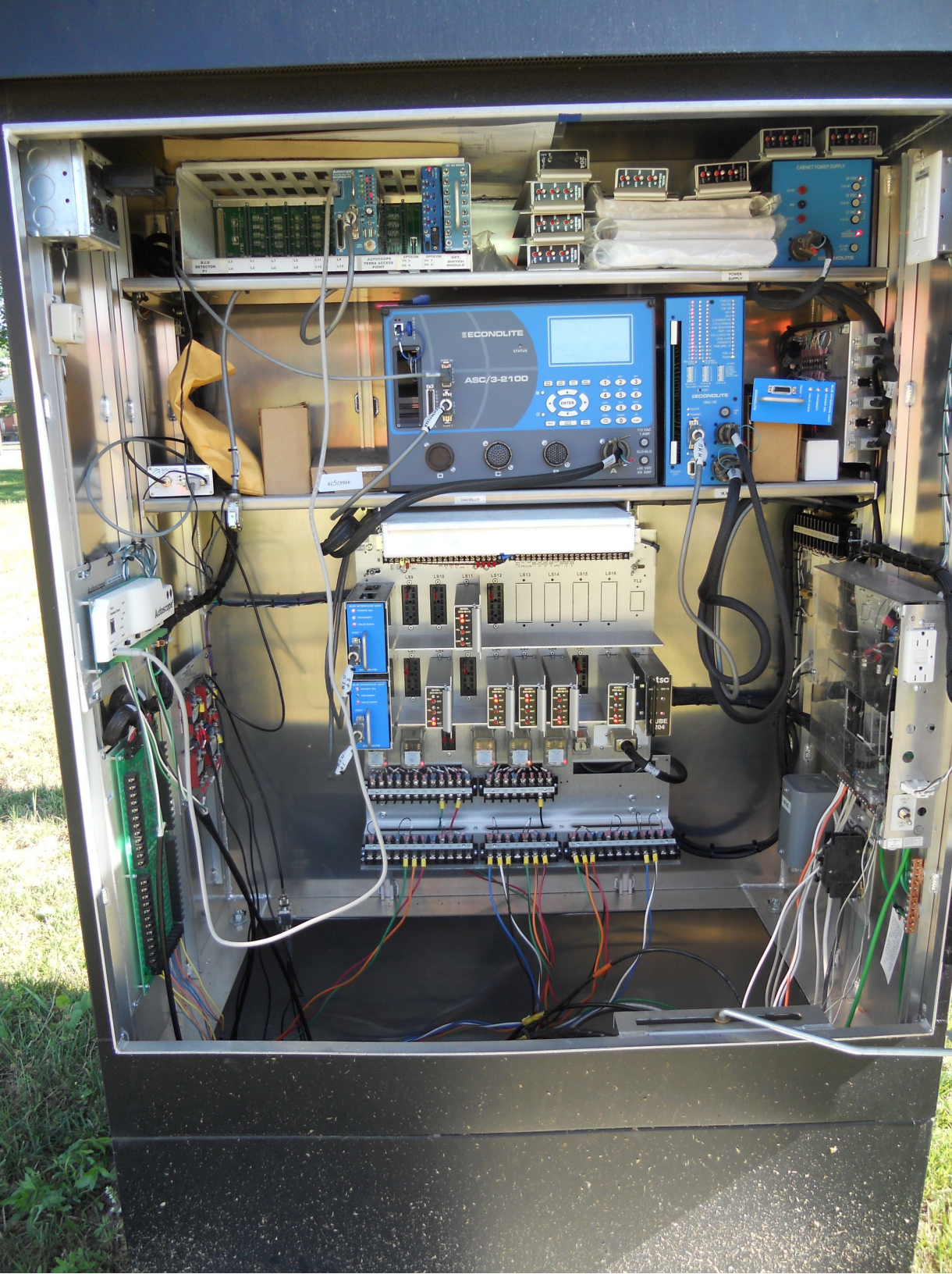
Chittenden County  
Transportation Authority  
VT ROUTE 15 / ETHAN ALLEN AVE

SIGNAL LAYOUT

LD Lamoreaux & D  
Consulting Engi  
14 Morse Drive, Essex,  
802-878-4458 www.la







**HAZARD / PELIGRO**  
HAZARD OF ELECTRICAL SHOCK OR BURN  
SERVICE BY AUTHORIZED PERSONNEL ONLY  
DO NOT PAINT OVER OR REMOVE THIS LABEL  
**PELIGRO DE DESCARGA ELECTRICA O QUEMADURA**  
SOLAMENTE PERSONAS AUTORIZADAS DE LA COMPANIA  
ELECTRICA PUEDEN MANTENERLO  
NO PINTEN ENCIMA NI REMUEVAN ESTA ETIQUETA

elster

000000

CONTAINS FCC ID: G2C-RADIAN SERIAL# 14 536 905  
CONTAINS FCC ID: G2C-RADIAN  
GMP  
E14536905

elster  
TYPE R220

14536905

CL200, 120V, 3W, 60Hz FM 125 Watt-hour Meter KH10 TA 30  
LAW ID: 078-0007180001

ZFSWK80000-05  
04.1-1501

INDIAN BANK  
TYPE 30 ENCLOSURE

MAINTENANCE

CIRCUIT BREAKERS UNDER FLAP  
NO FUSES IN BOX  
DO NOT BREAK SEAL

**DANGER / PELIGRO**  
HAZARD OF ELECTRICAL SHOCK OR BURN  
SERVICE BY AUTHORIZED PERSONNEL ONLY  
DO NOT PAINT OVER OR REMOVE THIS LABEL  
**PELIGRO DE DESCARGA ELECTRICA O QUEMADURA**  
SOLAMENTE PERSONAS AUTORIZADAS DE LA COMPANIA  
ELECTRICA PUEDEN MANTENERLO  
NO PINTEN ENCIMA NI REMUEVAN ESTA ETIQUETA

**Autoscope<sup>®</sup> Terra Access Point ECONOLITE**

POWER MVP 1-16

SELECT

VIDEO OUTPUT

DET. SW. MODULE

DET 1-16

ECONOLITE

B.I.U DETECTOR #1	L3	L1	L7	L5	L11	9	10	OSCOP ACCESS POINT	OPTICOM CH. A	OPTICOM CH. B	OPTICOM CH. C	OPTICOM CH. D	DET. SWITCH MODULE
	L4	L2	L8	L6	L12								

**ECONOLITE**

STATUS

**ASC/3-2100**

DATA KEY

PORT 3A

PORT 2

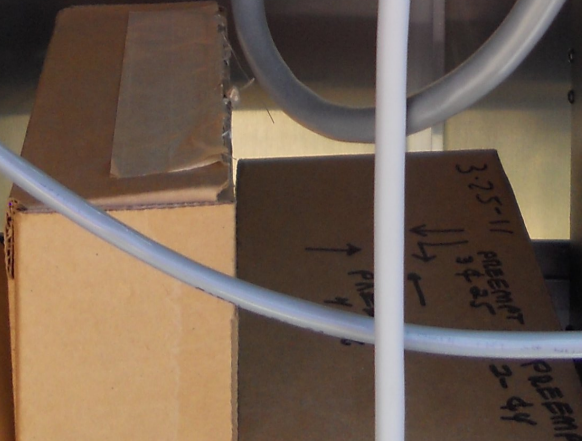
PC

TERMINAL

CB-31

MAIN MENU

HELP



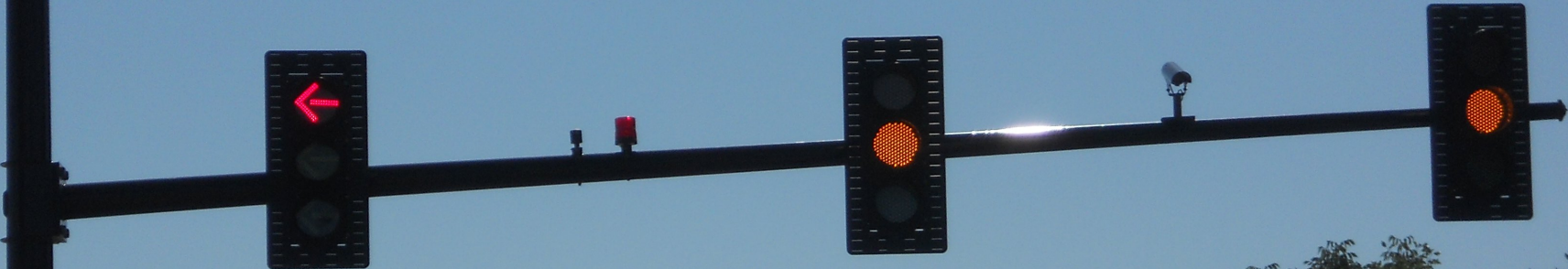




ONLY

THRU  
TRAFFIC  
KEEP  
RIGHT







U.H.C.  
POLE 3E-13.54 32'8"  
ARM 7E-8.88 38'0"  
55 K.V.  
01/201



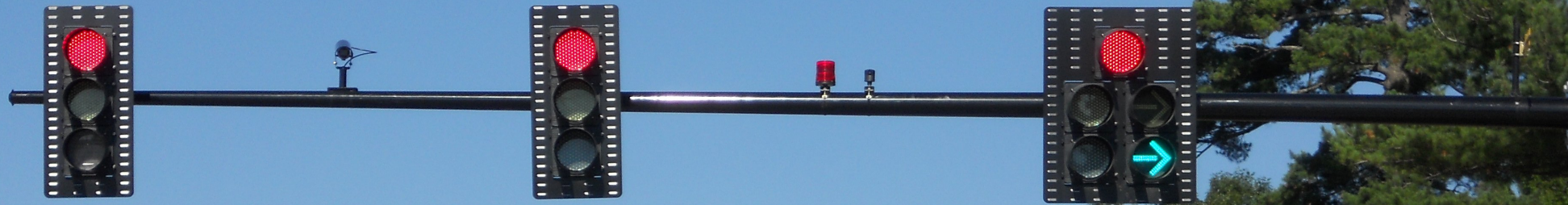
ONLY





Ethan Allen Ave





Ethan Allen A

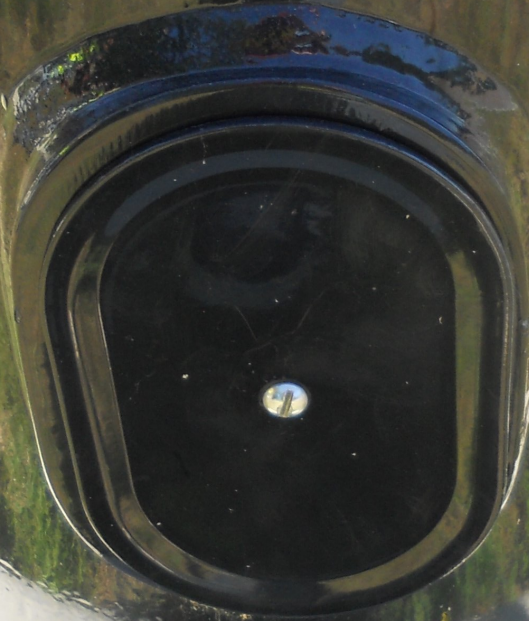


Ethan Allen Ave





U.M.C.  
POLE 3E-11.50 X 32'0"  
ARM 3E-8.50 X 35'0"  
/55 K.S.L.  
01/2011



Ethan Allen Ave





















U.S.C.  
100'00" X 32'0"  
100'00" X 10'0"  
U.S.I.  
01/2011





5/19/2012

1999

2012

© 2012 Google

Google earth

Imagery Date: 5/19/2012



1999

44°30'15.45" N 73°08'30.79" W elev 324 ft

Eye all

601 ft



Date: 08/10/2012

Timing Data:

Phase	1	2	3	4	5	6	7	8	9
Phases in use		X		X	X	X		X	
Min Green	0	8	0	10	12	8	0	0	5
Walk	0	5	0	5	0	5	0	5	0
Ped Clr	0	7	0	7	0	7	0	7	0
Veh Ext	5	5	5	5	5	5	5	5	5
MAX 1	0	43	0	27	19	18	10	10	35
MAX 2	0	24	0	39	18	19	10	10	40
MAX 3	0	61	0	20	35	20	0	0	0
Yellow	3	4	3	4	4	4	3	3	3
All Red	2	2	2	2	2	2	2	2	1
Recall to Max	0	0	0	0	0	0	0	0	0

Coordination Patterns: ACS3/Naztec Cordinated Phases 2 & 6

Pattern 1									
Cycle Length	82	Offset	90	COS	111				
Splits	Ph 1	0	Ph 2	60	Ph 3	0	Ph 4	40	
	Ph 5	30	Ph 6	30	Ph 7	0	Ph 8	0	
	Ph 9	0	Ph 10	0	Ph 11	0	Ph 12	0	
Pattern 2(21)									
Cycle Length	91	Offset	65	COS	121				
Splits	Ph 1	0	Ph 2	30	Ph 3	0	Ph 4	48	
	Ph 5	24	Ph 6	28	Ph 7	0	Ph 8	0	
	Ph 9	0	Ph 10	0	Ph 11	0	Ph 12	0	
Pattern 3									
Cycle Length	93	Offset	99	COS	131				
Splits	Ph 1	0	Ph 2	72	Ph 3	0	Ph 4	28	
	Ph 5	44	Ph 6	28	Ph 7	0	Ph 8	0	
	Ph 9	0	Ph 10	0	Ph 11	0	Ph 12	0	
Pattern 4									
Cycle Length	66	Offset	5	COS	141				
Splits	Ph 1	0	Ph 2	61	Ph 3	0	Ph 4	39	
	Ph 5	50	Ph 6	50	Ph 7	0	Ph 8	0	
	Ph 9	0	Ph 10	0	Ph 11	0	Ph 12	0	

Action Plan

Action Plan	Pattern
1	1
2	2
3	3
4	254-FREE
5	4

Day Plan [1]

Event	Action Plan	Step Begins
1	2	0600
2	1	0900
3	3	1400
4	1	1800
5	5	2300
6	5	0000